

## **ABSTRACT**

### **TITLE OF THE ABSTRACT:**

PATIENT REPORTED HEALTH RELATED QUALITY OF LIFE AND NEUROCOGNITIVE FUNCTION ASSESSMENT IN PATIENTS WITH HIGH GRADE GLIOMA

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### **OBJECTIVE:**

To assess the patient reported health related quality of life (HRQOL) and Neurocognitive functioning (NCF) in high grade glioma patients who are willing to have adjuvant treatment after surgery.

### **METHODOLOGY:**

This hospital based observational prospective study was conducted on patients diagnosed with high grade glioma receiving adjuvant chemo-irradiation. Patient reported HRQOL and NCF assessment studies were done at three time points, namely before and after radiotherapy and after adjuvant chemotherapy. Twenty patients were recruited for the study. HRQOL and NCF were assessed using standard questionnaires such as FACT-Br, MMSE scale and MOCA scale. Variation in the scores over the time period of study was documented and compared to assess improvement or decline in the quality of life and neurocognitive status of the patients and to evaluate correlation between HRQOL and NCF.

### **RESULTS AND CONCLUSION:**

Of the 20 patients 10(50%) underwent sub-total resection, 9 patients (45%) underwent gross tumour resection and one patient (5%) underwent lobectomy. There was statistically significant improvement in all the aspects of HRQOL (p value <0.001) and NCF (p value<0.000) over the three timelines. There was decline in the scores with disease recurrence. The correlation between HRQOL and NCF was quite evident and statistically significant (pre radiotherapy p value<0.0002, post radiotherapy p value<0.1693 and post chemotherapy p value<0.0001).

The overall results showed that in patients with high grade glioma, post-operative radiotherapy and chemotherapy improves the HRQOL and NCF. The decline in HRQOL and NCF in a post treatment period is directly related to disease recurrence and there is a direct correlation between neurocognition and quality of life.